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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,784	10/29/2003	Su-Ching Chien	MR3029-80	6089
4586	7590	03/23/2005	EXAMINER	
ROSENBERG, KLEIN & LEE 3458 ELLICOTT CENTER DRIVE-SUITE 101 ELLICOTT CITY, MD 21043			KO, TONY	
			ART UNIT	PAPER NUMBER
			2878	

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/694,784

Applicant(s)

CHIEN, SU-CHING

Examiner

Tony Ko

Art Unit

2878

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Claim Objections

1. Claim 12 is objected to because of the following informalities: "said first reflected time" lacks of antecedent basis. Appropriate correction is required.

DETAILED ACTION

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 12 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 12 and 14 are grammatically incorrect.
4. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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2. Claims 1 are rejected under 35 U.S.C. 102(b) as being anticipated by Shay (U.S. Patent 4,865,447).

3. Regarding claim 1, Shay discloses (Fig. 3) an optical method for detecting an object (glassware), said optical method comprising: generating a plurality of coded signals (Col. 4, Lines 60 to Col. 5, Lines 14); communicating said plurality of coded signals to corresponding plurality of light sources (12,14); modulating said plurality of light sources according to said plurality of coded signals; emitting a modulated light beam to said object from said plurality of light sources; receiving (18, 20) a reflected modulated light beam reflected from said object; de-modulating said reflected modulated light beam to obtain a code information there within; and determining a status of said object according to said de-modulated (626) code information of said reflected modulated light beam

4. Claims 1, 3-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Dickson (U.S. Patent 6,193,157).

5. Regarding claims 1, 3-6, Dickson discloses (Fig. 1) an optical method for detecting an object (48), said optical method comprising: generating a plurality of coded signals (Col. 4, Line 16); communicating said plurality of coded signals to a corresponding plurality of light sources (12, 14, 16); modulating said plurality of light sources according to said plurality of coded signals (Col. 4, Lines 11-15); emitting a modulated light beam to said object from said plurality of light sources; receiving a reflected modulated light beam reflected from said object; de-modulating said reflected modulated light beam to obtain a code information there within; and determining a

status (whether the bar code is present) of said object according to said de-modulated code information of said reflected modulated light beam. Dickson also discloses the emitting light source is a flat array (12, 14, 16).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2, 8-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickson (U.S. Patent 6,193,157) in view of Hamada (U.S. Patent 6,718,005).

8. Regarding claims 2 and 8-10, Dickson discloses the invention set forth above. Dickson also discloses Dickson does not disclose the plurality of coded signals are coded in binary coding. Hamada discloses (Col. 4, Lines 53-64) coding signals in binary coding. It would have been obvious to a person of ordinary skill in the art at the time of the invention to use binary coding to facilitate the use of digital device.

9. Regarding claims 12 -14, as understood, Dickson in view of Hamada discloses the invention set forth above, Dickson in view of Hamada does not disclose the object reflecting a second reflected modulated light beam in a second reflected time is far away said light emitting source flat array, wherein said second reflected time is longer than said first reflected time nor did they disclose the object reflecting a second reflected modulation light beam in a second reflected time that is object with higher

height. It is well known to detect the relative position of the object to the detector. It would have been obvious to a person of ordinary skill in the art at the time of the invention to detect the relative position of the object to determine the strength of signal should be sent to the object.

10. Claims 7, 15 and 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickson (U.S. Patent 6,193,157).

11. Regarding claims 7, 15, 17-21, Dickson discloses (Fig. 1 and Fig. 7) a digital circuit, said digital circuit generating a plurality of coded signals (Fig. 7), a multiplex, said multiplex communicating said plurality of coded signals to a corresponding plurality of light sources (Abstract); said plurality of light sources (12, 14, 16) emitting the modulated light beam to detect an object (48); a plurality of lens, said plurality of lens (90, 92, 94) located in front of said plurality of said light sources and focused said modulation light beam; at least a photosensitive device (60), the photosensitive device located within said plurality of light sources to receive a reflected modulated light beam; a treatment device, said treatment device (70) used to treat said plurality of said reflected modulated light beam and said corresponding code information within to determine a status of said object. Dickson does not disclose a wave filter, at least said wave filter located in front of at least said photosensitive device. It is well known to place a wave filter in front of the photosensitive device. It would have been obvious to a person of ordinary skill in the art at the time of the invention to place a wave filter to reduce the undesired signal.

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12. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dickson (U.S. Patent 6,193,157) in view of Hamada (U.S. Patent 6,718,005).

13. Regarding claim 16, Dickson discloses the invention set forth above, Dickson does not disclose the use of binary code. . Hamada discloses (Col. 4, Lines 53-64) coding signals in binary coding. It would have been obvious to a person of ordinary skill in the art at the time of the invention to use binary coding to facilitate the use of digital device.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony Ko whose telephone number is 571-272-1926. The examiner can normally be reached on Monday-Friday 7:30 - 4:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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TKO



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